

NIPO: 116-19-020-3

Oficina Española
de Patentes y Marcas

La Oficina Española de Patentes y Marcas tiene como misión impulsar la innovación y compartir sus resultados como valores y activos de diferenciación y desarrollo tecnológico. Por ello sus dos objetivos principales son proteger la innovación tramitando distintos títulos de propiedad industrial y difundir la información técnica contenida en las patentes a través de sus servicios de Información Tecnológica, uno de ellos estos Boletines.

En esta nueva andadura del Boletín de Vigilancia Tecnológica del Sector Transformador Plástico que comenzó el primer trimestre de 2021, se ha reestructurado el contenido del Boletín, intentando reflejar la realidad en propiedad industrial de la Industria del Plástico para hacer llegar a las empresas e investigadores del sector, con periodicidad trimestral, una selección de las patentes más recientemente publicadas en el sector de transformación de los materiales plásticos. Las patentes aparecen clasificadas en los siguientes apartados: nuevos productos en los principales sectores de aplicación, invenciones que

contribuyen al desarrollo sostenible, mejoras de procesos productivos y nuevos materiales plásticos con propiedades avanzadas. No se ha incluido en este Boletín información sobre la tecnología de impresión 3D, ya que ésta aparece recogida en el boletín de Vigilancia Tecnológica Impresión 3D que la OEPM comenzó a publicar en el 2020

A través de las imágenes que representan cada sección y que aparecen en la portada del Boletín, se accede de forma directa a los contenidos de las mismas, donde encontraremos el número de publicación de cada patente, quien la solicita, una pequeña descripción de la invención y el enlace de acceso al texto completo del documento. De forma complementaria, se incluye una selección de noticias sobre propiedad industrial y actividades relevantes de la OEPM.

Si se desea recibir este Boletín periódicamente basta con cumplimentar el correspondiente [formulario de suscripción](#)

Contenido



NUEVOS PRODUCTOS

SOSTENIBILIDAD Y
ECONOMÍA CIRCULARNUEVOS PROCESOS
INDUSTRIALESMATERIALES CON
PROPIEDADES AVANZADAS
O MEJORADAS

NUEVOS PRODUCTOS

En el siguiente gráfico se muestra la distribución de las 15.504 familias de documentos de patente recuperadas en este trimestre en el apartado de Nuevos Productos. Tal y como viene ocurriendo, el sector dedicado a la electrónica sigue siendo el que más documentos de patente aporta.



Las siguientes tablas muestran una selección de los documentos más representativos, junto con un enlace directo a la base de datos Espacenet, el solicitante y una breve descripción de la invención.

Envase y Embalaje

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
US2023399160	(SCHW-I) SCHWARTZ G W A	Container for storing foodstuff and other edible substances E.G. condiments and spreads with integrated utensil E.G. plastic spoons, has of the utensil extends and remains within the second compartment upon separation of the utensil head housing from the container housing
EP4276031	(CABK-N) CABKA GROUP GMBH	Cam for base for transporting goods, has leg comprising flat frames extending perpendicular to frame where cam comprises compressible isolation element located below head and extending partially around frame
FR3134949	(STON-I) STONA D	Method for reducing number of dog droppings on floor by using flat accessory, involves maintaining holding unit in contact with ground, and pulling segments on to move closing unit relative to sheet such that accessory closes on filling
JP2023148412	(DNTO) DAINIPPON TORYO KK	Coating material used for coating liquid storage container, comprises compound having several isocyanate groups, polyamine, compound having active hydrogen and inorganic material with preset average particle size, and produces coating film having preset tensile strength and elongation at break
WO2019195261	(CALD-N) CALDERCO HOLDINGS GROUP LLC	Single-serve beverage cup for containing E.G. wine, has seal and top cover that are arranged to close bowl opening, and bottom cover including opening for receiving liquor through opening of bottom cover and for maintaining bottle in cavity
JP2023157172	(BABA-N) BABA KAGAKU KOGYO KK	Partition for packaging container main case, has support protrusion which is shaped to protrude above surface of paper bottom plate, even if paper bottom plate is stacked on top of plastic partition material placed on bottom of storage unit of packaging container case
WO2023194663	(SULA-N) SULAPAC OY	Composite material used in product for food contact, comprises ternary biopolymer blend, where composite material comprises elastic biodegradable polyester, polyhydroxyalkanoate, biodegradable aliphatic polyester, hydrophilic lignocellulosic particles, inorganic filler, and processing additives

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
US2017029187	(SONO) SONOCO DEV INC	Media wrapper for wrapping stack of paper for copier or printer, has weakness portion connecting line for extending between first and second lines of weakness portion and placed at non-zero angle with respect to first and second lines
WO2023194959	(NIVE) NICOVENTURES TRADING LTD (JOYC-I) JOYCE M	Pouched product E.G. smokeless tobacco product, for delivering E.G. flavors, during oral use, has nonwoven web provided with biodegradable binder, where biodegradable binder is located with aliphatic polyesters
WO2023183424	(FARB) BAYER HEALTHCARE LLC	Child-proof stick pack such as flexible package, has single sheet of film comprising two or more layers, where layer comprises polyethylene terephthalate and faces environment exterior to stick pack
EP4257512	(BTEN-N) B & T ENTWICKLUNGS & VERMARKTUNGSGES	Pressure-relief valve for packaging food products E.G. fresh roasted coffee beans, has cup shaped main portion with circumferential wall equipped to be fastened to flexible package material, and sealing liquid provided between main portion and valve membrane
ES2953584	MARQUEZ SILVA BELEN [ES]	Edible container for food, manufacturing method and its use (Machine-translation by Google Translate, not legally binding)
DE102022106959	(TESA) TESA SE	Production of multifunctional element used in packaging application, involves converting top layer-free portion of adhesive layer of width into non-adhesive layer
DE102022107094	(BECK-N) BECKER SONDER-MASCHBAU GMBH	Method for producing packaging pad from cardboard web, involves folding outer section of cardboard web in such way that z-shaped cross-sectional profile is formed together with connection area of main section of cardboard web which directly adjoins outer section

Construcción

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
WO2023225888	(BRIL-N) BRILLIANT OPTRONICS CO LTD	Multifunctional smart window useful for projecting and shielding light comprises diffusion layer with liquid crystal material located between transparent substrates, and projection unit emits projection light incident from diffusion layer
EP4286596	(LANG-N) LANGMATZ GMBH	Shaft with viewing window, has head frame attached to top of shaft walls, and recess formed in formwork section of head frame, in which viewing window is arranged, which is removed in order to be able to visually inspect area of spindle
DE102022205298	(FRAW) ROTO FRANK FENSTER & TUERTECHNOLOGIE GMB	Guide roller for use with fitting unit of window or door I.E. sliding door of motor vehicle, has annular first roller part radially surrounds second roller part, where first roller part is axially spaced apart from second roller part
US2020131840	(GRAF-N) GRAFFITI SHIELD INC	Polymeric film for placement on vehicle window comprises film having surface with surface area and contains a crescent shaped aperture on an edge of film and visual indicia etched in close proximity to crescent shaped aperture
EP4279679	(FAKR-N) FAKRO PP SP ZOO	Window frame for roof window, has several chambers that are located in window frame stiles, and ventilation channel that is provided with inlet opening and outlet opening, where vent is located in ventilation channel respectively
EP4279680	(FAKR-N) FAKRO PP SP ZOO	Window frame E.G. window sash, for roof window, has upper stile inner wall and side stile inner wall comprising partially welded common edge and corner fitting, which fills remaining part of window frame between upper stile and side stile
FR3134840	(SOPR-N) SOPROFEN SA	Box for roller shutter of window or door, has rear board, upper board, and connecting element which is removably fixed to front longitudinal edge of fixed portion, and on which access hatch is removably secured by its rear longitudinal edge
WO2023205040	(DUPO) DDP SPECIALTY ELECTRONIC MATERIALS US (DUPO) DUPONT SAFETY & CONSTR INC	Article inserted into air gap space between window and wall, has tube that includes holes that penetrate through inner layer and outer layer of upper portion and/or lower portion of tube, where pouch is located within tube
FR3134839	(NHYD) HYDRO EXTRUDED SOLUTIONS AS	Striking type window or French window for facade of building, has tongue sandwiched between peripheral seal and free upright of service leaf when window is closed to ensure continuity of sealing between service leaf and peripheral seal

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
EP4261019	(EMME-N) EMMEGI SPA	Method for processing profiled bars of machine tool for making doors or window frames during cutting and milling operations, involves joining profiled bar to another profiled bar by welding, and cutting part of seal with rotary tool
WO2023243211	(KUBI) KUBOTA CORP	Conduit grouping device for grouping pipe constituting pipe network E.G. waterwork, has grouping control unit that updates new grouping base point for any of multiple conduits that have not yet grouped in vicinity of base point through base point setting unit
KR20230169830	(SHNA) SHONAN GOSEI JUSHI SEISAKUSHO KK	Tubular branch pipe lining material for regenerating branch pipe split from main pipe E.G. sewer, has brims that are bonded to separation element by adhesive applied to recess of one brim in which separation element of tubular resin absorbing material is arranged
PL440582	(ROTO-N) ROTOWELD SP ZOO	Device for securing joint of pipes in particular concrete lined with thermoplastic plastics material, has preparatory head which contains pair of cleaning tips moved by technological gap distance supported by pressure cylinders
PL441191	(PLUC-I) PLUCIENNIK A	Facade panel has heating chamber that is provided to form closed circuit in which air heated in heat exchanger mounted on chimney pipe of central heating furnace circulates and warms building walls with heat recovered from central heating furnace
WO2023242519	(SFCS-N) SFC SOLUTIONS AUTOMOTIVE FRANCE	Tubular elastomeric pressure sensor for use in door or shutter to detect obstacles by using tubular elastomeric sensor arrangement of deformation sensor system, has polymer material for forming two electrically insulating parts
GB2618080	(FLUI-N) FLUID DESIGN & CONSTR LTD	System for interconnecting acoustic barriers at E.G. construction site, has first and second connecting portions arranged such that first and second compressible sound-insulating layers are compressed in region that forms sound insulating joint between first and second acoustic barriers

Automoción

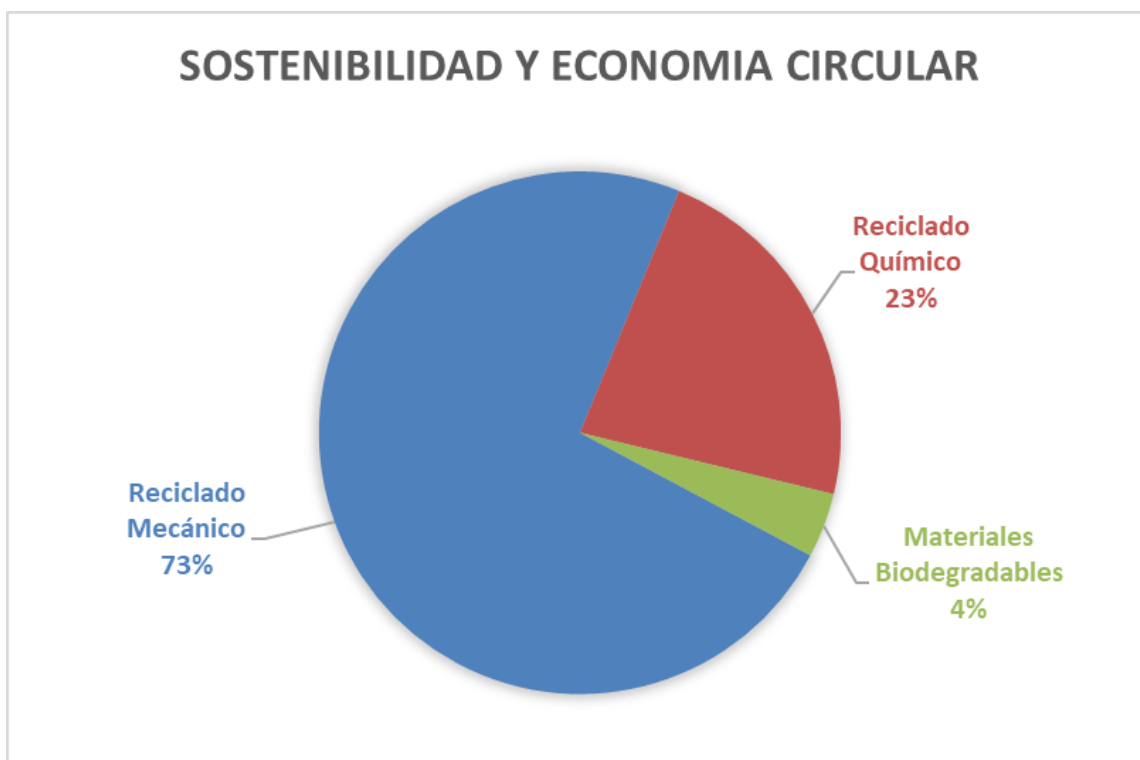
Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
DE102022113027	(VOIJ) VOITH PAPER PATENT GMBH	Pressure tank for gas-powered vehicles, has wall formed with cavity for storing gas, and tubes protruded into cavity and provided with openings through which gas is filled when tank is filled, where wall is provided with reinforcing layer made of fiber-reinforced plastic and internal liner
CN220164009	(XCMG) XUZHOU XUGONG AUTOMOBILE MFG CO LTD	Lightweight wheel upper mudguard for commercial vehicle, has material of mud baffle plate lower section body, and material of middle section body and upper section body of fender is any one of GMT, hemp fiber plate and polyurethane
DE102022114895	(BAYM) BAYERISCHE MOTOREN WERKE AG	Fastening device for partially flat shell element with support element and pressure element in single-track motor vehicle, has fastening unit provided with pressure element that is fixed to support element such that shell element is fitted between pressure and support elements
DE102022112770	(WBAI) WEBASTO SE	Roof arrangement for vehicle roof of motor vehicle, has roof opening with second sealing profile for plug connection having plug body, which is formed from thermoplastic material with frame provided on which movable roof element is held
US2023365036	(FAUR) FAURECIA AUTOMOTIVE SEATING INC	Spacer panel for use with rear side of rear seat backrest of vehicle for improving functionality of rear side when rear seats are folded in automotive seat, has support structure configured to be attached to rear side of backrest of seat of vehicle
DE102022111468	(KOEK-N) KOEGEL TRAILER GMBH	Corner angle profile installed in wall of vehicle structure E.G. refrigerated vehicle structure, has line channel which is arranged between vertical and horizontal angle legs, and roller rail for displaceable partition which is formed between horizontal angle leg and line channel
FR3134553	(RENA) RENAULT SAS	Device for attaching movable element including any object or article intended to be hung on wall to double of motor vehicle, has flexible clips having one conformations capable of cooperating in abutment with rear face of one wall to press hooking head against one wall
WO2023193835	(DAZA-I) ERAZO DAZA J	Sustainable and eco-efficient vehicle for transportation, preparation and delivery of food to consumers, has activated carbon filter which is arranged in exhaust pipe and in rotating element that allows both external and internal air filtering

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
DE102022002322	(DAIM) MERCEDES-BENZ GROUP AG	Fastening arrangement for vehicle, has circumferential edge region that delimits flange, and adjoins joining region, and set on flange, free space that is formed between edge region and component to accommodate melt polymer, and free space that is completely filled with melt polymer
DE202022102835	(IGGI) IGUS GMBH	Pivot bearing E.G. plastic plain bearings, used for freewheel fixed at bottom bracket of bicycle, has first bearing body and second bearing body, which are designed to be complementary to one another and/or rotatable against one another, where bearing is partially formed from thermoplastic material
US2024009959	PORSCHE AG [DE]	Underride protection device and method for producing an underride protection device
WO2023186315	(INVE) EMS-CHEM AG (TOYT) TOYOTA BODY SEIKO CO LTD	Slider used for car seat support, comprises extended upper portion and extended base portion comprising two lateral guide portion with guide protrusion pointing upward in direction of upper portion and groove on each side, is connected by constricted portion and fiber reinforced polyamide
DE102022106678	(WBAI) WEBASTO SE	Arrangement for roof of vehicle E.G. passenger car with roof opening, has locking lever controlled from locking position into unlocking position through rear carriage when rear carriage is moved along vehicle's longitudinal direction

VOLVER A
CONTENIDO

SOSTENIBILIDAD Y ECONOMÍA CIRCULAR

En el siguiente gráfico se muestra la distribución de las 1.125 familias de documentos de patente recuperadas en este trimestre en el apartado de Sostenibilidad y Economía Circular. El reciclado mecánico sigue siendo el sector que mayor actividad innovadora presenta.



Las siguientes tablas muestran una selección de los documentos más representativos, junto con un enlace directo a la base de datos Espacenet, el solicitante y una breve descripción de la invención.

Materiales Biodegradables

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
KR20230165729	(HANW) HANWHA SOLUTIONS CORP	Composition used for forming biodegradable resin molded article, comprises polyolefin-based compound, resin, aliphatic-aromatic copolyester-based compound, and modified polyolefin-based compound
WO2023223689	(KANF) KANEKA CORP	Composition used for hot-melt adhesive for sealing corrugated cardboard box, carton, and sanitary material, comprises poly(3-hydroxyalkanoate)-based resin and polycaprolactone
JP2023168207	(UYTY) UNIV TOKYO	Composition used for forming self-healing material, comprises vitrimer including polymer having ester bond and polyrotaxane which comprises several cyclic molecules and chain polymer piercing cavities of several cyclic molecules and some have functional group having ester bond
WO2023210177	(DNIN) DIC CORP	Biodegradable resin decomposition accelerator used in composition for forming molded article, comprises polyester having dicarbonyl-based repeating unit, oxygen-containing repeating unit and carbonyl-based repeating unit
WO2023190184	(KANF) KANEKA CORP	Thermoplastic resin composition used in molded article E.G. sheet, film, blow molded product, extrusion molded product, vacuum molded product, or injection molded product, comprises thermoplastic resin, and crosslinked resin particles containing polyhydroxyalkanoate resin
WO2023190059	(SEKP) SEKISUI KASEI CO LTD	Polybutylene succinate adipate resin particle aqueous dispersion used as polybutylene succinate adipate resin particles, comprises polybutylene succinate adipate resin particles dispersed in water, where aqueous dispersion contains aqueous polymer
WO2023190618	(MITU) MITSUBISHI CHEM CORP	New acid-modified polyester resin used in biodegradable adhesive, is prepared by grafting alpha,beta-unsaturated carboxylic acid and/or its anhydride onto aliphatic-aromatic polyester resin containing aliphatic diol unit and aromatic dicarboxylic acid unit, and has preset melt flow rate

Reciclado Mecánico

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
BE1030436	(SOUD-N) SOUDAL NV	Method for recycling cartridge for use in cartridge gun, involves removing residual material from collected part or parts, and reusing plastic from collected part or parts from which residual material is removed
EP4289585	(SIMA-N) SIMAP SRL	Production of product E.G. tray, involves removing elements from surgical gown and drape, fragmenting fabric, sintering/densifying fragmented fabric to obtain irregular granules, adding impact modifier masterbatch and plasticizing
WO2023234777	(ORAN-N) ORANGE DYNAMICS BV	Method for decoloring colored thermoplastic material, for manufacturing rigid plastic containers E.G. bottles, involves decolouring colored extruded material using decolouring substance and guiding extruded material through decolouring substance in continuous process
WO2023228130	(RODR-I) PEREZ RODRIGUEZ E A (SICU-I) PEREZ SICULABA D V	Method for cleaning and recovering polyvinylbutyral (PVB) from laminated glass, involves passing centrifuged or dried, clean and dry plastic through cutter until obtaining flakes with specific diameter
FR3135916	(SFRA) SAFRAN	Method for manufacturing self-stiffened intermediate casing for twin-spool turbojet of aircraft, involves side-by-side positioning preforms to form assembly, draping interior surface to assembly, and co-cooking consolidated assembly
EP4282612	(EURO-N) EUROSTYLE SYSTEMS TECH CENT FRANCE	Method for manufacturing E.G. door panel for thermoplastic structure in motor vehicle, involves assembling thermoplastic structure at rear of external appearance layer, where external appearance layer is formed beforehand
WO2023224046	(ASAH) ASAHI KASEI KK	Production of resin composition used in form of pellet E.G. masterbatch, involves generating non-standard products of thermoplastic resin and classifying into grades based on design factor, regenerating non-standard product by grade to obtain recycled product, and obtaining recycled product

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
US2023364571	(GTHR-N) G3C TECHNOLOGIES CORP	Reactor for converting polymer containing materials, such as rubber, including tire rubber, or pyrolyzed rubber, including pyrolyzed tires, or plastic, including pyrolyzed plastic, into output products, comprises central heating-zone section having first processing zone configured to heat material
US2017165751	(VELO-N) VELO3D INC	Method for printing three-dimensional object involves using energy beam to transform at least portion of exposed surface to transformed material, in which transformed material is portion of three-dimensional object
WO2023217375	(BOSC) BOSCH GMBH ROBERT	Method for associating object with object type by sorting system for sorting plastic objects, involves associating red green blue image and power intensity heatmap image to object type if object is determined to be picked up by sorter
EP4269474	(SERM-N) SERMAG SRL	Producing olefinic thermoplastic elastomer used in waterproofing membrane, by E.G. feeding low density polyethylene and/or linear low density polyethylene to mouth of cavity open at top of densifying apparatus, which is delimited by casing
WO2023203194	(ALPL) ALPLA WERKE ALWIN LEHNER GMBH & CO KG	Method for producing R-polyethylene terephthalate (PET) plastic material for use in thin-wall injection molding process of container E.G. cups, involves directly extruding and injecting resulting mixture of granules and VPET into injection mold
WO2023199251	(CONS-N) CONSORZIO RADICI RICERCA & INNOVAZIONE (RADI-N) RADICI NOVACIPS SPA (RADI-N) RADICI YARN SPA	Process for recycling multicomponent polymeric waste materials for E.G. textile product, involves mechanical grinding of multicomponent polymeric waste material comprising polyamide and polyurethane, adding granulate to virgin polymer, adding mixture of compatibilizer, and forming article
WO2023193946	(PAUP-I) PAUPERS A	Flexible material bottle, has strap that is embedded in main portion such that upper portion along with opening and closure portions are bent and secured behind strap, and pocket is embedded in main portion such that upper portion along with opening and closure portions are bent and hidden in pocket

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
DE102022107100	(WISS-I) WISSING J	Arrangement for processing plastic, has agglomerator that is provided with housing which is directly connected to extruder such that agglomerated plastics pass from one opening creating housing outlet into screw conveyor which transports plastics when avoiding intermediate processing step
WO2023180493	(WISS-I) WISSING J	Disc agglomerator for picking up plastic waste and forming it into elongated, cone or sausage-shaped agglomerates in doughy state, has outlet opening which is closed by closure in such way that agglomerates are only passable to limited extent or not at all
EP4249199	(QCPH-N) QCP HOLDING BV	Continuous degassing of recycled polyolefin during manufacture of article, involves providing recycled polyolefin pellets comprising limonene into degassing container, adding steam comprising air, degassing, removing degassed pellets, cooling and drying to obtain clean product having low limonene

Reciclado Químico

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
WO2023237603	(BADI) BASF SE	Manufacture of polyamide used for polyamide composition for polymer product E.G. granulate, strand, rod, plate, pipe, foil, layer, film, sheet, fiber, filament, and coating, involves melt-mixing another polyamide and salt of diacid and diamine, polyamide having preset lower viscosity number
JP7252585	(JEPL-N) JEPLAN INC (SHIN-N) SHINTECH CORP (SHIN-N) SHINTECH KK	Production of bis-(2-hydroxyethyl) terephthalate for producing recycled polyethylene terephthalate, involves mixing polyester waste with monoethylene glycol and catalyst, depolymerizing to obtain product containing crude terephthalate, adding cleaning medium, and recovering
GB2618830	(QUAN-N) QUANTAFUEL ASA	Preparation of hydrogen and liquid fuel E.G. naphtha from plastics feedstock, involves generating gas stream by performing pyrolysis on feedstock comprising plastics, condensing gas stream to generate other gas stream and pyrolysis gas and oil, reforming process, and generating liquid fuel
WO2023227473	(NEVE-N) NEVEON GERMANY GMBH	Continuously reacting plastic material containing polyurethane, involves providing reaction mixture comprising plastic material present as solid and polyurethane and aqueous medium, and transporting reaction mixture by first screw
FR3135717	(CNRS) CENT NAT RECH SCI (ELRO) ELKEM SILICONES FRANCE SAS (UYLY) UNIV LYON 1 BERNARD CLAUDE (ECOL-N) ECOLE SUP CHIM PHYS ELECTRONIQUE LYON	Method for preparing organochlorosilane comprises reacting at least one silicone with metal chloride or metalloid in presence of at least one metal salt catalyst, where metal chloride or metalloid is different from metal salt
EP4279538	(BORA) BOREALIS AG	Modifying post-consumer recycled polyolefin composition to make article by adding radical initiator to post-consumer recycled polyolefin composition, adding twofold unsaturated hydrocarbon compound, mixing components and extruding mixture
WO2023213363	(CONW) CONTINENTAL REIFEN DEUT GMBH	Vulcanizable rubber mixture used in vulcanizate and Rubber product, comprises diene rubbers, fillers, and rubber regenerates which is produced by devulcanization of rubber material mixture in extruder, where rubber material mixture consists of shredded treads from truck radial tires

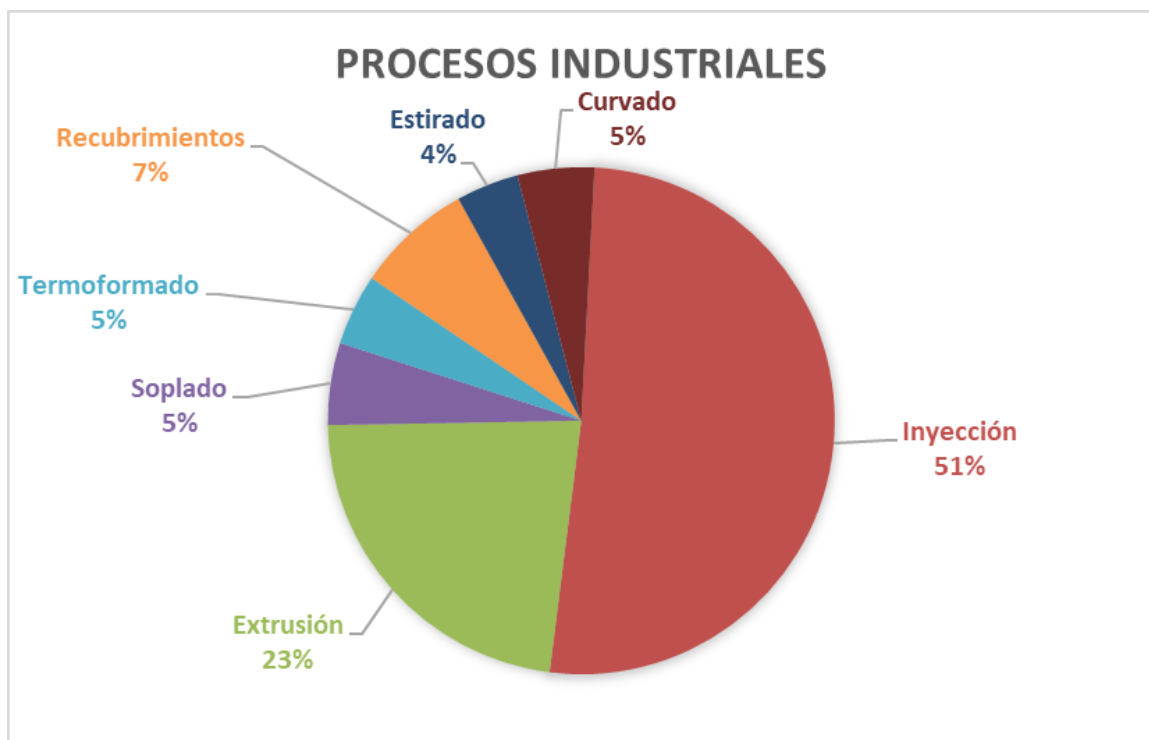
Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
WO2023211284	(NEDE) NEDERLANDSE ORG TOEGEPAST NATUURWETENSCH	Method for retrieving light plastic fraction used as E.G. ore reducing agents in blast furnaces, involves providing plastic waste and superheated water in vessel, agitating obtained superheated aqueous plastic mixture, and separating light plastic fraction from heavy plastic and aqueous fraction
WO2023194442	(RECY-N) RECYCELIT	Recycling terephthalate polyester into terephthalate diester used for manufacturing food tray, involves grinding or shredding material to produce fragments, depolymerizing of polyester into terephthalate ester in presence of catalyst E.G. metal or organic etheroxide base, polar solvent and alcohol
WO2023189639	(MITU) MITSUBISHI CHEM CORP	Decomposing halogenated hydrocarbon resin to produce organic acids and alcohol by contacting microorganism, preferably Pholiota, treated bacterial cell product and/or culture supernatant of microorganism with halogenated hydrocarbon resin
TW202340350	(EVON) EVONIK OPERATIONS GMBH	Depolymerization of polyethylene terephthalate, involves preparing lithium solution of alkali metal cation glycolate in glycol in electrolytic cell, and reacting lithium solution with polyethylene terephthalate to obtain mixture comprising bis-2-hydroxyethyl terephthalate
EP4277945	(INCM) BROMINE COMPOUNDS LTD	Reclaiming of fiber from textile made of cellulose and synthetic fiber blend, such as nonwoven fabric, involves adding textile to solution of molten salt hydrate and acid catalyst, terminating reaction to form fibrillated-depolymerized cellulose, recovering cellulose, and recovering synthetic fiber
WO2023194140	(BADI) BASF SE	Value chain return process for polyurethane rigid foam of insulation material in building, involves hydrogenating polyurethane rigid foam containing phosphorous ester-based flame retardant in presence of transition metal catalyst complex, and recovering flame retardant from hydrogenation product

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
FR3134391	(RECY-N) RECYCELIT	Recycling terephthalate polyester into terephthalate diester used for manufacturing food tray, involves grinding or shredding material to produce fragments, depolymerizing of polyester into terephthalate ester in presence of catalyst E.G. metal or organic etheroxide base, polar solvent and alcohol
WO2023193942	(EVON) EVONIK OPERATIONS GMBH	Depolymerizing polyethylene terephthalate (PET), involves reacting sodium or potassium hydroxides and glycol to obtain solution SAP comprising glycol and sodium or potassium glycolates and reacting SAP solution with PET
EP4253505	(GRAP-N) GRAPHENE SYNTHETIC FEEDSTOCK SL	Transformation of solid plastic waste into linear ramified and/or cyclic saturated and/or unsaturated hydrocarbon used as feedstock, involves adding activated graphene nanomaterial to receptacle, heating receptacle, thereby generating gases, collecting generated gases, and refrigerating unit
WO2023180271	(CNRS) CENT NAT RECH SCI (ELRO) ELKEM SILICONES FRANCE SAS (UYLY) UNIV LYON 1 BERNARD CLAUDE (ECOL-N) ECOLE SUP CHIM PHYS ELECTRONIQUE LYON	Preparation of cyclic organopolysiloxane used in polymerization processes, involves performing reactive distillation of organopolysiloxane in presence of alkaline salt catalyst chosen from salts of potassium, sodium, rubidium or cesium, and multidentate complexing agent
FR3133854	(CNRS) CENT NAT RECH SCI (ELRO) ELKEM SILICONES FRANCE SAS (UYLY) UNIV LYON 1 BERNARD CLAUDE (ECOL-N) ECOLE SUP CHIM PHYS ELECTRONIQUE LYON	Preparation of cyclic organopolysiloxane used in polymerization processes, involves performing reactive distillation of organopolysiloxane in presence of alkaline salt catalyst chosen from salts of potassium, sodium, rubidium or cesium, and multidentate complexing agent
DE102022106745	(SALE-I) SALEWSKI W H	Product with inherent and permanent biocidal properties is formed from blend of at least two different thermoplastics, into which solid oligomers and/or polymeric ureas from at least three amines are incorporated
US10954354	(TIME-N) TIMEPLAST INC (TIME-N) TIMEPLAST LLC	Upcycling of polymer from post-consumer product, involves forming pellets of mixture containing polymers from diverse post-consumer waste stream and/or wax repolymerized at end of extrusion process, and submerging pellets in solvent

VOLVER A
CONTENIDO

NUEVOS PROCESOS INDUSTRIALES

En el siguiente gráfico se muestra la distribución de las 7.966 familias de documentos de patente recuperadas en este trimestre en el apartado de Nuevos procesos industriales. Los procesos que mayor actividad innovadora reflejan son el de inyección y extrusión



Las siguientes tablas muestran una selección de los documentos más representativos, junto con un enlace directo a la base de datos Espacenet, el solicitante y una breve descripción de la invención.

Inyección

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
WO2023240370	(FOST-N) FOSTAG FORMENBAU AG	Injection molding tool with multi-portion mold insert frame, has mold insert frame that is provided for receiving multiple nozzle head and mold inserts, where each nozzle head and mold inserts is provided with cavity formed in insert frame, which is supplied with plastic melt
WO2023241928	(INTE-N) INTERCOS SPA	Double-layer mold for machines for production of lipsticks or similar bar-shaped cosmetic products, formed by two coaxial layers of different chemically linked silicones, where inner thinner layer is made of hard silicone and outer thicker layer is made of soft silicone
WO2023243290	(TORA) TORAY IND INC	In-mold transfer molding film used for manufacturing molded product E.G. for mobile phone, comprises base material film, release layer, and conductive layer comprising particles containing zero-valent carbon, silver, gold, copper, nickel, chromium, zinc, and/or platinum, and resin
WO2023238898	(SEIK-N) SEIKI CORP	Gate structure for mold with built-in hot runner for manufacturing and shaping products and components, has opening/closing portion that includes shutter element that is switched between open state in which gate is opened and closed state in which gate is closed
WO2023238492	(HITA) HITACHI LTD	System for supporting supercritical injection molding, in which supercritical fluid (SCF) containing material information is generated with correct values, by changing arbitrary SCF-containing material information
WO2023238789	(GLOB-N) GLOBAL POLYACETAL CO LTD	Resin composition used for pellet, comprises polyacetal resin and core-shell elastomer, and produces molded test piece having preset flexural modulus
WO2023238880	(SGIK) SEIKO GIKEN CO LTD	Method for manufacturing molded product with in-mold coating, involves compressing elastic structure when abutment surface of first mold and second mold are abutted, and sealing liquid coating agent injected into coating gap to prevent leakage from between abutting surfaces

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
FR3136536	(EADS) AIRBUS ATLANTIC	Guiding device for filling pipe e.g. double-walled pipe with granular material in fluid circuit E.G. fuel circuit of aircraft, has flow passages that are defined between connecting arms for evenly distributing granular material during filling process
WO2023234058	(SUNR) SUNTORY HOLDINGS LTD	Injection molding device for molding thermoplastic resin supplied from decontamination machine, has hot runner that is provided with first sprue runner, second sprue runner, and nozzle provided in fluid communication with first sprue runner and second sprue runner
KR20230166859	(LSIN) LS MTRON LTD	Door device for injection molding machine for performing injection molding to manufacture injection products E.G. TV, has opening/closing interlocking unit that interlocks side door and upper door
US2023382011	(NSSK) NISSEI PLASTICS IND CO LTD	Method for molding resin material mixed with pulverized material, involves processing molding condition for modifying based on pulverized material bulk density data, virgin material bulk density data obtained by measurement, and conversion coefficient
EP4279244	(ALLM) ABB E-MOBILITY BV	Method for producing charging connector for electric vehicle, involves placing reinforcement element into mould for injection molding and forming portion of charging connector by injection overmoulding reinforcement element with second thermoplastic material
EP4269062	(WILD-N) WILD & KUEPFER AG	Nozzle tip for hot runner nozzle used to transport plastic melt to cavity of injection molding tool for manufacturing plastic products, has front and rear outlet openings that are provided into which front or rear melt outlet channel opens, where front melt outlet channels are directed backwards
KR20230155037	(EMOL-N) EMOLDINO CO LTD (LEEY-I) LEE Y	Sensing device for controlling quality of plastic injection molded products, has magnet part fixed with built-in magnet that is fixedly mounted on movable side mold, and sensor module fixed with built-in Hall sensor
WO2023208749	(LEGO) LEGO AS	Injection molding machine for facilitating automated molding of work pieces in plastics, has valve part slidably connected to nozzle tip, and sliding along longitudinal axis between first position closest to proximal end and second position
WO2023212215	(AMCO-N) AMCOR RIGID PACKAGING USA LLC	Method for forming preform that is molded into container, involves dispensing amount of additive and thermoplastic resin into injection molding machine, and forming additional preform by operating molding machine to inject resin

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
KR20230142039	(MECE-N) MECETECH CO LTD	Manufacture of detachable dental ceramic implant, involves injecting polymer material feedstock, injecting ceramic feedstock, injection molding implant injection product, dissolving insert, removing E.G. stearic acid, and sintering degreased product
WO2023199470	(FUFA) FANUC CORP	Injection molding machine for ventilating clean air to mold, has partition portion which changes volume between first space and second space, and exhaust port which is provided to protective cover and which is in communication with second space, where exhaust port is larger than gap
WO2023190927	(DAIK) DAIKIN IND LTD	New copolymer containing tetrafluoroethylene units and perfluoro(propyl vinyl ether) units used in injection molded article or molded article such as microtube, tank, filter cage, bolt, nut, film, or wire coating
WO2023195194	(NSSK) NISSEI PLASTICS IND CO LTD	Molding optimization method for injection molding machine for optimizing molding conditions, involves setting second molding conditions such that second melting characteristics approximate basic melting characteristics, and performing set temperature by predetermined conversion unit
WO2023195419	(POPL) POLYPLASTICS KK	Method for predicting defective molding, involves calculating temperature distribution and pressure distribution in injection-molded article, and measuring linear expansion coefficient data of thermoplastic resin in advance
FR3134331	(MECP) NOVARES FRANCE	Injection molding machine intended for manufacture of injected permanent magnet, has shaped pin which is movable in translation relative to mold between inactive position and active position and demagnetization device that is configured to remove magnetization of shaped pin
WO2023190920	(DAIK) DAIKIN IND LTD	Copolymer used in molded article E.G. nuts, bolts, bottles, gaskets, wire coatings, pipes, valves, tanks, containers, filter cages, flow meters, pumps, wafer carriers, bellows, spacers, gasoline tanks, fisheries and hoses, comprises tetrafluoroethylene units and perfluoro(propyl vinyl ether) units
WO2023193107	(HUIN) HUSKY INJECTION MOLDING SYSTEMS LTD	Injection molding system for heating hot runner E.G. injection molding machine, has system controller that calculates relative weight associated with heating zone based on first control gain value and total heater power, and determines zone type associated with heating zone based on relative weight

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
WO2023193106	(HUIN) HUSKY INJECTION MOLDING SYSTEMS LTD	Injection molding system, has system controller for determining heating schedule for hot runner based on predicted heating times for heating zones, and operating heaters in accordance with heating schedule
WO2023192434	(ENTG) ENTEGRIS INC	Method for over-molding tubular structure, involves clamping tubular structure to mold cavity structure in Z-direction and containment direction, and injecting thermoplastic material into mold cavity of mold cavity structure to over-mold portion of tubular structure
FR3134092	(STBL) STAUBLI FAVERGES	Method for unloading mold in plastic injection press installation utilized for producing plastic part, involves authorizing entry of order for demagnetization of pads by man-machine interface when determining that output signal is collected

Extrusión

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
WO2023190898	(DAIK) DAIKIN IND LTD	Fluorine-containing copolymer used in molded article E.G. automobile radiator tanks, chemical liquid tanks, bellows, spacers, rollers, and gasoline tanks, comprises tetrafluoroethylene unit, hexafluoropropylene unit and fluoro(alkyl vinyl ether)unit
WO2023190901	(DAIK) DAIKIN IND LTD	New fluorocopolymer used for forming E.G. extrusion molded article, comprises tetrafluoroethylene unit, hexafluoropropylene unit and perfluoro(propyl vinyl ether) unit, and has preset melt flow rate measured at preset temperature
WO2023238431	(NIKL) JAPAN STEEL WORKS LTD	Method for controlling resin cutting device, involves controlling magnitude of rotary shaft retraction force applied to rotary shaft attached to cutter head on which cutter blades are arranged based on wear amount of cutter blades
WO2023238032	(NVCH) NOVA CHEM INT SA	Preparing thermoplastic composition extrudate comprises extruding thermoplastic composition having linear polyethylene, poly(ether-block-amide) copolymer, and poly caprolactone polymer in melt extrusion process
WO2023234220	(POPL) POLYPLASTICS KK	Production of thermoplastic resin composition for use in injection molding applications, involves preliminary melt-kneading thermoplastic resin and aggregate of fibrous filler in barrel using twin-screw extruder, which is performed in pre-kneading zone comprising kneading disk, and melt-kneading
WO2023234777	(ORAN-N) ORANGE DYNAMICS BV	Method for decoloring colored thermoplastic material, for manufacturing rigid plastic containers E.G. bottles, involves decolouring colored extruded material using decolouring substance and guiding extruded material through decolouring substance in continuous process
WO2023203914	(MITU) MITSUBISHI CHEM CORP	Production of glass fiber reinforced polyester-based resin composition used for forming molded product, involves using polyester resin, glass fiber and polymer/additive in twin screw extruder and composition has preset shear viscosity
US2023356516	(DUPO) DDP SPECIALTY ELECTRONIC MATERIALS US (DUPO) DUPONT CHINA RES & DEV & MANAGEMENT CO (EIDC-N) EIDCA SPECIALTY PROD CO	Method for forming reinforced microporous polyolefin sheet, involves extrusion laminating non-porous sheet of polyolefins onto side of non-woven fabric, and subjecting laminate to sequential stretching steps to produce micropores

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
WO2023208664	(BASE) BASELL POLIOLEFINE ITAL SRL	Process for preparing pelletized polyolefin composition with E.G. ethylene for applications, involves feeding virgin polyolefin to feeding point, and measuring flow rate of pellets of final polyolefin composition obtained from extruder
JP7369987	(SHON-N) SHONAN TRADING CO LTD (YASU-I) YASUDA M	Cooling device for molten resin, has spiral guide passage which is formed on inner peripheral surface of case portion and that is provided with air for cooling and for guiding resin cut by cutter arranged to side in axial direction
WO2023203913	(MITU) MITSUBISHI CHEM CORP	Production of glass fiber-reinforced polyester resin composition used for forming molded article, involves kneading polyester resin and other polymers or additives, adding glass fiber, reducing pressure, devolatilizing, increasing pressure at tip of screw, extruding, water-cooling and cutting
WO2023190945	(DAIK) DAIKIN IND LTD	Copolymer comprises tetrafluoroethylene units and perfluoro(propyl vinyl ether) units
WO2023198550	(CVST) COVESTRO DEUT AG	Multi-shaft screw machine E.G. twin-screw extruder for degassing solvent-containing polycarbonate solutions, has comb having respective distance reduced by clearance between screw element and housing wall and by additional gap to respective center of rotation
DE102023001393	(GIES) GIESECKE & DEVRIENT EPAYMENTS GMBH	Secure element with card-shaped body with visible surface made of multiple layers arranged one above other and produced by coextrusion used as chip card, comprises first layer as base layer made of first material which comprises base polymer, and second layer as color layer made of second material
WO2023188641	(YOKO) YOKOHAMA RUBBER CO LTD	Method for manufacturing tire element, involves calculating mass of tire element and magnitude of variation in distribution of constitutive element formed from unvulcanized rubber having greater content of particular component in longitudinal direction
WO2023190679	(HITM) MAXELL SEIKI LTD	Extrusion-foamed sheet transported to cutting machine for being cutting into desired shape on production line, has ruler that is removed from main image to obtain other image, and where other image is subjected to two-dimensional discrete Fourier transform to obtain another image
WO2023189108	(HITM) MAXELL SEIKI LTD	Coextruded sheet for forming resin molded product, comprises polycarbonate resin, core layer made of foamed resin, skin layers made of non-foamed resin, having preset ratio of melt volume rate of polycarbonate resin in core layer to polycarbonate resin in skin layer

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
WO2023190899	(DAIK) DAIKIN IND LTD	New fluorocopolymer for forming E.G. extrusion molded article, comprises tetrafluoroethylene unit, hexafluoropropylene unit and fluoro(alkyl vinyl ether) unit, and has preset melt flow rate, and total number of carbonyl group-containing terminal group, fluorinated vinyl group and hydroxymethyl group

Otros Procesos

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
EP4266486	(AGCG) AGC GLASS EURO	Method for manufacturing transparent open container, involves depositing transparent dielectric panel fixed by an interlayer on first surface of the continuous metallic-based sheet, bending flat assembly on folding lines to form open container defined by X, Z and Y-axis
WO2023190617	(NIT) NITTO DENKO CORP	Shaping method used in molding of resin products in various fields such as food containers, in which maximum tensile load value of load-strain curve is measured by tensile test is larger, and has resin molded structure which is placed in mold without preheating
JP2023148346	(TOK) SUMITOMO RIKO CO LTD	Skin material wound along circumferential direction of shaft element, has plane whose cross-sectional shape orthogonal to axial direction of shaft element is formed in C-shape or U-shape during state in which foamed resin or elastomer is molded
KR20230143912	(KTGG) KT & G CORP	Aerosol generating device for extracting certain components from medium or substance by producing aerosol, has sealing frame that is in contact with bracket frame and sealing frame, and sealing frame is in contact with sealing cap and inner surface of body
US2023312821	(CANO) CANON KK	Resin mixture comprises binder resin, and carbon black dispersed in binder resin, binder resin containing polyethylene terephthalate having imide bond in its molecule
DE102022108952	(DRAE) DRAEXLMAIER GMBH LISA	Interior decorative component for covering loudspeaker arrangement of motor vehicle I.E. passenger car, has sound-permeable adhesive layer for connecting dimensionally stable decorative carrier and sound-permeable acoustic layer

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
WO2023188531	(TOKG) SUMITOMO RIKO CO LTD	Vibration-proof damping component used for bumper springs, comprises polyurethane having polyol component made of polyester polyol except short chain polyol, isocyanate component having 1,5-naphthalene diisocyanate, and foam of thermoplastic urethane composition having preset isocyanate group index
WO2023237968	(SCMI) SACMI COOP MECCANICI IMOLA SA	Apparatus for producing objects in continuous cycle from plastic material, has control unit which drives actuators to move corresponding partitions from upper limit position to lower limit position with metering unit in discharging and charging configurations to make doses of plastic fed to seats
WO2023224467	(VMIH) VMI HOLLAND BV	Apparatus for converting sheet of elastomeric material into continuous strip, has cutting section for providing sequence of cuts in sheet, and infeed section for feeding sheet to cutting section in feeding direction along feeding path
WO2023202910	(CVST) COVESTRO DEUT AG	Production of plastic compound used for producing molded article, involves using formulation containing thermoplastic components, preferably polycarbonate in multi-shaft screw machine with co-rotating, parallel screw shafts rotating at same speed
DE102022108498	(GNEU-N) GNEUSS GMBH	Screen wheel filtering device for high-pressure filtration of plastic melt, has sieve wheel that is arranged with large number of sieve points, positioned and flowed through between inlet and outlet channels
DE102022108497	(GNEU-N) GNEUSS GMBH	Screen wheel filtering device for high-pressure filtration of E.G. plastic melt, has pressure relief bore fluidly connected to relief opening on outside of housing through pressure relief channel, and bearing rin fixed on sieve wheel and arranged between inlet plate and outlet plate
WO2023235860	(NITE) NTT RES INC	Flexible electrode for use in clinically measuring human body biophysical properties, preferably for measuring contour of human organ, has silane layer in between first kirigami pattern and second kirigami pattern, where silane layer configured to protect first kirigami pattern
WO2023234417	(TOYM) TOYOBO KK	Release film used for E.G. adhesive tape, comprises biaxially oriented laminated polypropylene film including at least base layer comprising polypropylene resin and surface layer comprising polypropylene resin, and release layer

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
DE102022113534	(BRKM) BRUECKNER MASCHBAU GMBH (YAMA-I) YAMAGUCHI S	Stretching system I.E. transverse, longitudinal and/or simultaneous stretching system, for stretching plastic film, during production of plastic film, has compensating device designed to remove quantity of air from oven through one of compensating openings
WO2023220456	(PROA-N) PROAMPAC HOLDINGS INC	Multilayer material used for forming article for packaging product E.G. food product, comprises substrate formed of cellulosic fiber-based material, oxygen barrier layer which is innermost layer and heat sealable, and inner moisture barrier layer and outer moisture barrier layer
WO2023210066	(NIKL) JAPAN STEEL WORKS LTD	Stretching machine E.G. simultaneous biaxial stretching machine for extending resin film, has rail that is provided with slit, where end of chain is controlled, and slits that are extended in direction inclined with respect to extended direction
WO2023205040	(DUPO) DDP SPECIALTY ELECTRONIC MATERIALS US (DUPO) DUPONT SAFETY & CONSTR INC	Article inserted into air gap space between window and wall, has tube that includes holes that penetrate through inner layer and outer layer of upper portion and/or lower portion of tube, where pouch is located within tube
WO2023190265	(TORA) TORAY IND INC	Biaxially oriented polyester film used as film for dry film resist support, has film portion in which one surface is surface that satisfies predetermined conditions when observed with AFM in square field of specific range under specific predetermined condition
WO2023238497	(SHNA) SHONAN GOSEI JUSHI SEISAKUSHO KK	Tubular branch pipe lining material for regenerating branch pipe split from main pipe E.G. sewer, has brims that are bonded to separation element by adhesive applied to recess of one brim in which separation element of tubular resin absorbing material is arranged
FR3136031	(ESCU) VALLOUREC OIL & GAS FRANCE	Tubular component for tubular threaded joint used in gas or oil wells and underwater applications, has metal portion located with first threaded portion, and composite material portion mounted with second threaded portion
WO2023224521	(CATH-N) CATHPRINT AB	Tube-in-tube merger for use in advanced medical catheter, has rigid outer casing and interior expanding substance including melting temperatures higher than merging temperature that is equal to or higher than melting temperature
WO2023190501	(TOKG) SUMITOMO RIKO CO LTD	Skin material wound along circumferential direction of shaft element, has plane whose cross-sectional shape orthogonal to axial direction of shaft element is formed in C-shape or U-shape during state in which foamed resin or elastomer is molded

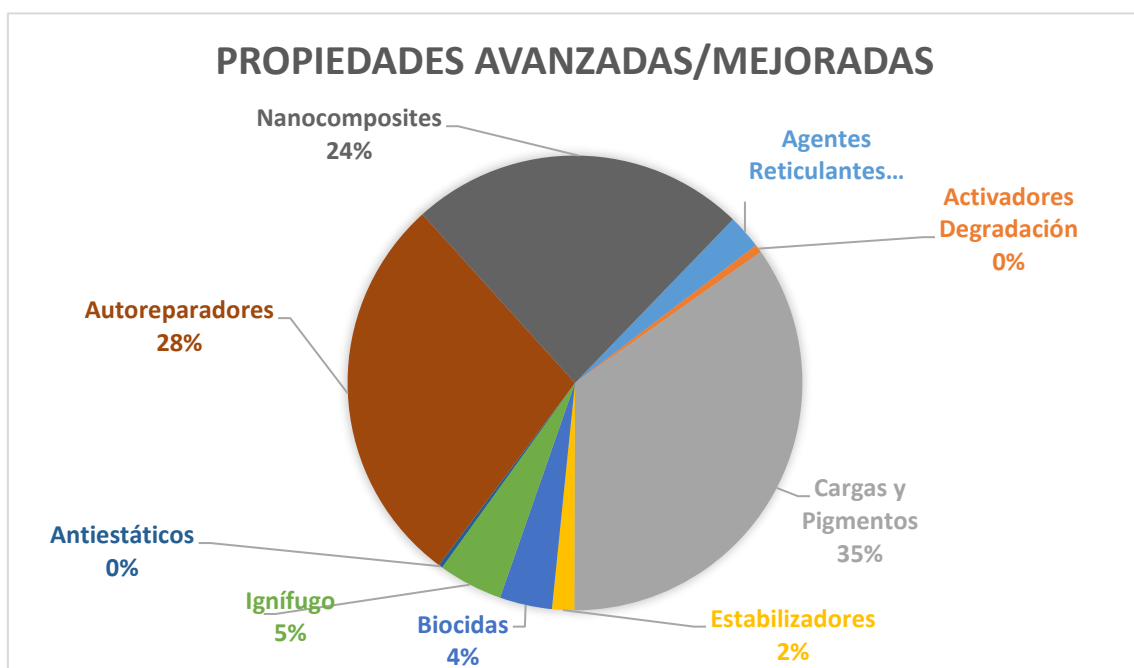
Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
WO2023232614	(EVON) EVONIK OPERATIONS GMBH	Method for producing multidimensional rigid foam portion by jigsaw puzzle-piece connection, involves milling multidimensionally shaped component segments into jigsaw puzzle-piece shapes, and assembling multidimensional component segments to give multidimensional rigid foam portion
WO2023211258	(GLDS) LG ENERGY SOLUTION LTD	Pouch-type battery case for pouch-type secondary battery of E.G. mobile phone, has second peripheral portion connecting two ends of folding and terrace portions, where second peripheral portion is thinner than first peripheral portion
WO2023205716	(CABN) CARBON INC	Hollow dental mold for use in making dental appliances E.G. orthodontic aligners, has drain channels that are extended from hollow cavity upward through upper portion, and are configured for draining of residual polymerizable resin from hollow cavity
WO2023190617	(NITL) NITTO DENKO CORP	Shaping method used in molding of resin products in various fields such as food containers, in which maximum tensile load value of load-strain curve is measured by tensile test is larger, and has resin molded structure which is placed in mold without preheating
WO2023237968	(SCMI) SACMI COOP MECCANICI IMOLA SA	Apparatus for producing objects in continuous cycle from plastic material, has control unit which drives actuators to move corresponding partitions from upper limit position to lower limit position with metering unit in discharging and charging configurations to make doses of plastic fed to seats
EP4286137	(SIDL) SIDEL PARTICIPATIONS	Method for thermal conditioning of preforms before forming by stretch blow molding, involves transferring preforms at end of diffusion into forming units of forming station at production rate whereas diffusion path comprises final buffer section via which preforms travel over in adjustable duration
DE102023110175	(INOT-N) INOTECH KUNST GMBH	Dispenser container for holding filling product E.G. cosmetic product, has outer container nipple that forms ventilation channel in fluid communication with the ventilation groove which is in fluid communication with the ventilation recess
WO2023210263	(YACH) YACHIYO IND CO LTD	Production apparatus of fuel tank mounted on mobile object such as automobile, has cooling mold which is provided to cool primary molded article, while crushing bead-shaped portion by cooling blow pressure and deforming bead-shaped portion into rib-shaped portion

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
DE102022109966	(SALZ) KHS GMBH	Heating method for thermal conditioning of preforms in container manufacturing machine e.g. blow molding machine, involves temporarily acting mouth region of preform in directed direction by cooling medium during guidance along heating section
WO2023199162	(SPIA) SIPA SOC IND PROGETTAZIONE & AUTOMAZIONE	Blowing mold for molding plastic container E.G. plastic bottle, has main portions which, when mold is closed form support or striker plate adapted to abut against neck ring of preform and surface of support is provided with protrusions adapted to come into contact with portion of below neck ring
US2023312821	(CANO) CANON KK	Resin mixture comprises binder resin, and carbon black dispersed in binder resin, binder resin containing polyethylene terephthalate having imide bond in its molecule
WO2023187477	(BRKS) BRASKEM SA	Polyethylene composition useful in blow-molded articles, comprises multimodal high-density polyethylene comprising lower molecular weight fraction, and higher molecular weight fraction, and low-density polyethylene
WO2023182494	(NASB) NISSEI ASB MACHINE CO LTD	Device for manufacturing resin-made container such as reusable returnable PET container used for transporting drinking water for water server, has preliminary blow portion which is provided with preforming mold for allowing vertical axis stretching of preform

VOLVER A
CONTENIDO

MATERIALES CON PROPIEDADES AVANZADAS O MEJORADAS

En el siguiente gráfico se muestra la distribución de las 531 familias de documentos de patente recuperadas en este trimestre en el apartado de Materiales con propiedades avanzadas o mejoradas. En este trimestre, el volumen de documentos de patente a cargas y pigmentos sobresale seguido por autorreparadores y nanocompuestos.



Las siguientes tablas muestran una selección de los documentos más representativos, junto con un enlace directo a la base de datos Espacenet, el solicitante y una breve descripción de la invención.

Cargas y Pigmentos

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
WO2023243707	(SEKI) SEKISUI CHEM CO LTD	Silicone composition for heat dissipating component comprises specific organopolysiloxane, organohydrogen polysiloxane having silicon-hydrogen at both two molecular chain ends and molecular-chain side chain, with silicon hydrogen on molecular-side chain, heat conducting filler and curing catalyst
WO2023223775	(POPL) POLYPLASTICS KK	Laser light-transmitting resin composition used for forming molded article used for composite molded article used in e.g. electrical/electronic application, comprises polybutylene terephthalate resin, polycarbonate resin, and chromium complex azo dye
WO2023234341	(SUMB) SUMITOMO BAKELITE CO LTD	Resin composition used for forming cured product I.E. fixing component of easy-to-dismantle rotor, comprises thermosetting component and produces cured product having silicon-containing structure by thermosetting
WO2023234125	(ELED) DENKA CO LTD	Binding protective tape used for binding and protecting high-voltage cables for E.G. electric vehicles, comprises base material and adhesive layer formed on side of base material which is composed of resin composition comprising polyvinyl chloride resin, plasticizer, filler, and polyorganosiloxane
EP4289633	(SUMR) SUMITOMO RUBBER IND LTD	Tire e.g. racing tire, has tread portion comprised with rubber composition, rubber component and filler, and rubber composition comprised with liquid rubber
WO2023228815	(TORA) TORAY IND INC	Resin composition used for forming cured product, comprises resin having diamine residues, and containing polyimide, polybenzoxazole and/or its precursor, polyamide, and copolymers, inorganic particles having preset average particle diameter, and ester solvent
EP4276146	(CONW) CONTINENTAL REIFEN DEUT GMBH	Tire used for vehicle, contains tread, belt bandage, airtight inner layer, and squeegee layer containing rubber mixture of fillers including carbon black and silica, and sulfur accelerator crosslinking system containing benzothiazolesulfenamide accelerator, and having preset sulfur content

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
WO2023213363	(CONW) CONTINENTAL REIFEN DEUT GMBH	Vulcanizable rubber mixture used in vulcanizate and Rubber product, comprises diene rubbers, fillers, and rubber regenerates which is produced by devulcanization of rubber material mixture in extruder, where rubber material mixture consists of shredded treads from truck radial tires
WO2023210400	(SHIE) SHINETSU CHEM CO LTD	Thermosetting rubber composition used for injection molding, comprises perfluoropolyether polymer, fluorine-containing organohydrogen polysiloxane, hydrosilylation reaction catalyst, and hydrophobic silica powder
WO2023204033	(DNIN) DIC CORP	New polyester-based compound used as inorganic filler fluidity modifier in composition for forming molded article E.G. heat conductive silicone sheet, has preset acid value and hydroxyl value
EP4265436	(SUMR) SUMITOMO RUBBER IND LTD	Motorcycle tire E.G. pneumatic tire, comprises tread portion comprising center portion having tire equator, and pair of shoulder portions having tread grounding ends, and rubber composition comprising fillers containing silica, and carbon black, and preset loss tangent
WO2023190376	(MITA) MITSUI CHEM INC (MATU) PANASONIC HOLDINGS CORP	Cyclic olefin resin composition used in varnish for forming prepreg for forming circuit board of electronic device, comprises cyclic olefin copolymer, azo compound comprising azo group and nitrogen atoms, and hindered phenol compound
JP7347699	(TORA) TORAY IND INC	Polyolefin film used in packaging material, has storage elastic modulus in direction of main orientation axis obtained at frequency for dynamic viscoelasticity measurement, and comprises metal particles and inorganic compound particles, E.G. oxide of aluminum and silicon
JP2023143433	(ASAH) ASAHI KASEI KK	Rubber composition used to form vulcanized rubber, comprises ethylene rubber-like polymer having preset iodine value, and rubbery polymer
WO2023235907	(STRA-N) STRASSER STEINE GMBH	Worktop for kitchen area, comprises mixture of fine-grained rock granules bound by hardenable polymer and optionally additive that influences external appearance, where mixture contains rock e.g. metamorphic hard rock, granite and vulcanite
WO2023194663	(SULA-N) SULAPAC OY	Composite material used in product for food contact, comprises ternary biopolymer blend, where composite material comprises elastic biodegradable polyester, polyhydroxyalkanoate, biodegradable aliphatic polyester, hydrophilic lignocellulosic particles, inorganic filler, and processing additives

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
WO2023189434	(TACA) TAICA CORP	Photocurable silicone resin composition used for forming cured product for sealing material for E.G. potting material, comprises organopolysiloxane containing mercaptoalkyl group, linear organopolysiloxane containing aliphatic unsaturated group, and photopolymerization initiator
WO2023190439	(ELED) DENKA CO LTD	Two-pack type curable composition set used for forming cured product, comprises agent containing copolymer containing (meth)acrylic monomer unit, vinyl-modified organopolysiloxane, thermally conductive filler, and reaction catalyst
WO2023190565	(FURU) FURUKAWA ELECTRIC CO LTD	Silane-crosslinkable silicone rubber composition used for producing molded article, comprises base rubber comprising millable-type silicone rubber, silane coupling agent that is graft-bonded to base rubber, inorganic filler, and silanol condensation catalyst
WO2023190440	(ELED) DENKA CO LTD	Two-component curing composition set used for forming cured product used as thermally conductive heat dissipating material for electronic device, comprises agents having preset thermal resistance value and viscosity measured by rotary rheometer
WO2023190309	(SUMB) SUMITOMO BAKELITE CO LTD	Surface-modifier resin composition used for producing electronic device, comprises phenoxy resin, used in process involves adhering surface-modifier resin composition to surface of structure including region and removing surface-modifier resin composition from surface to modify surface
WO2023189949	(ASAH) ASAHI KASEI KK	Polyfunctional vinyl aromatic copolymer used in curable resin composition, cured product, curable composite material, and resin composition varnish, comprises structural unit derived from divinyl aromatic compound and structural unit derived from monovinyl aromatic compound
WO2023181445	(MITV) MITSUBISHI MATERIALS CORP	Thermally conductive polymer composition used for electronic device, comprises liquid rubber having hydroxyl group in molecule, solvent having hydroxyl group in molecule, curing agent having functional groups in molecule, and filler, and has preset compressive modulus of elasticity after curing

Autorreparador

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
WO2023223926	(DNIN) DIC CORP	New glycidyl-ether-group-containing compound used in curable resin composition, comprises structural unit having maleimide structure and one or more glycidyl ether groups, and structural unit having furan structure, bonded through reversible bond by Diels-Alder reaction
WO2023223927	(DNIN) DIC CORP	New glycidyl ether group-containing compound used in curable resin composition E.G. remolding material composition for forming cured product for forming laminate and heat-resistant components
WO2023222616	(PURA) PURAC BIOCHEM BV	Particulate composition used for self-healing concrete, comprises limestone-forming bacteria or spores of limestone-forming bacteria and bacterial nutrient dispersed in lactic acid based oligomer matrix
JP2023168207	(UYTY) UNIV TOKYO	Composition used for forming self-healing material, comprises vitrimer including polymer having ester bond and polyrotaxane which comprises several cyclic molecules and chain polymer piercing cavities of several cyclic molecules and some have functional group having ester bond
WO2023203524	(MULT-N) MULTI-SCALE MEDICAL ROBOTICS CENT LTD	Composition used for slimebot in system, comprises source of tetrafunctional borate ions, buffer, magnetic particles, and polymeric glue having hydroxyl groups, where tetrafunctional borate ion, buffer and magnetic particles are crosslinked in polymeric glue to form non-Newtonian fluid composition
KR20230137245	(SMSU) SAMSUNG SDI CO LTD (UYKO) UNIV KOOKMIN IND ACAD COOP FOUND	Binder used for rechargeable lithium battery E.G., negative electrode, positive electrode, and electrolyte, electronic devices such as mobile phones, laptop computers, and electric vehicles, comprises copolymer comprising polymer electrolyte, conductive polymer, and polydentate chelating agent
US2023307183	(POLY-N) POLYCHARGE AMERICA INC	Self-healing metallized polymer capacitor formed in vacuum for preparing article, comprises non-thermoplastic polymer dielectric layers stacked with metallized electrodes to form non-wound layer stack devoid of air gaps between constituent layers
KR102481342	(UKYO) UNIV KYONGGI IND & ACAD COOP FOUND (PARK-I) PARK S	Method for manufacturing crack self-healing material for preventing leakage and faulty at concrete joints of structures, involves healing crack through hydration reaction when moisture flows into crack at expansion joint, where joint is constructed

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
US11781022	(BOEI) BOEING CO	Self-healing anti-corrosive coating composition for vehicle E.G. helicopter, comprises binder, electrically conducting polymer comprising biopolymer, fillers, and crosslinker, where electrically conducting polymer is chemically crosslinked with binder, and biopolymer comprises chitosan
KR20230134336	(UYKO) UNIV KOOKMIN IND ACAD COOP FOUND	Self-healing binder useful in producing slurry for cathode of lithium battery, comprises polymer electrolyte, multivalent chelating agent, conductive polymer, and polymer additive

Nanocomposite

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
WO2024014101	NITTA CORP [JP]	Injection molded body and method for producing same, method for producing composite fiber, cnt-attached carbon fiber and method for producing same, and method for producing carbon fiber composite
FI20225454	(ABOA-N) ABO AKAD	Hydrogel formulation used in ink formulation for forming three-dimensional products, comprises methacrylated cellulose nanofibrils having preset charge density, and water
EP4254608	(GEEL) VOLVO CAR CORP	Battery system for use in vehicle such as electric vehicles (BEVs) or hybrid electric vehicle (HEV) to power electric motors, has conductor that is formed by graphene layers bundled together, and layers that are provided substantially parallel to each other
KR20230129104	(COSB-N) COSBON CO LTD	Molding of heat dissipating resin composition containing thermally conductive filler and carbon nanotubes useful for secondary batteries, and lithium-ion batteries, comprises injecting resin composition into battery pack using dispenser
KR20230140200	(GUMI-N) GUMI ELECTRONICS & INFORMATION TECHNOLOG	Manufacture of nanopattern-containing structure on substrate used for E.G. cell culture medium, involves applying material based on ion-conductive polymer onto substrate, and compressing material through roll having corresponding nanopattern of structure
US2021208501	(USNA) US SEC OF NAVY	Performing graphene-enabled block copolymer lithography transfer to arbitrary substrate involves applying graphene on surface, adding block copolymers to graphene, and phase-separating block copolymers

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
KR20230146371	(UCHO) UNIV CHONNAM NAT IND FOUND	Nanoparticle complex useful in 3D printing material comprises reticulated polymer and inorganic nanoparticles dispersed in network polymer, and inorganic nanoparticles are covalently bonded to network polymer through linking group
US2023339173	(JAMB-I) JAMBHULKAR S (LIUS-I) LIU S (RAVI-I) RAVICHANDRAN D (SONG-I) SONG K (VALA-I) VALA P (XUWW-I) XU W (ZHUY-I) ZHU Y	Additive manufacturing ink used for pressure sensor comprises MXene nanoparticles comprising titanium carbide
US2023339198	(VADI-N) VADIENT OPTICS LLC	Nanocomposite gradient-index variable-focus optic for variable wavefront shaping of electromagnetic radiation, comprises first optical element including solidified heterogeneous coalescence of nanocomposite material providing first complex dielectric-function gradient

Otras propiedades

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
WO2023237418	(EVON) EVONIK OPERATIONS GMBH	Composition used for forming polyurethane rigid foam as insulating material, comprises halogen-free polyester polyol and halogenated polyol, physical blowing agent, flame retardant chosen from E.G. phosphonates and polyisocyanate component, and has preset index
WO2023208626	(BADI) BASF CHINA CO LTD (BADI) BASF SE	New carboxyl-terminated polyether-based amine compound used as blowing agent used in system for forming polyurethane foam used for composite used as board, panel in clean room cold storage, reefer, roof panel, laminate, pipe insulation in spray pipe and injection pipe
PL444120	(LUBE) POLITECHNIKA LUBELSKA	Epoxy composition and its preparation comprises styrene-modified epoxy resin with specified epoxy number and viscosity, amine hardener in the form of aliphatic amine adduct with specified amine number and viscosity and aluminum hydroxide
PL444121	(LUBE) POLITECHNIKA LUBELSKA	Epoxy composition comprises styrene-modified epoxy resin with preset epoxy number and viscosity, polyamide hardener in polyaminoamide form with preset amine number and viscosity, and antipyrène in aluminum hydroxide form
KR102587324	(GNTG-N) GNT CO LTD	Preparing one-component fire-resistant sealing composition useful for switchboards and distributors comprises adding silicone rubber, flame retardant, and silicone oil into mixer, adding foaming agent and extinguishing capsule and stirring

Nº DE PUBLICACIÓN	SOLICITANTE	CONTENIDO
KR20230142084	(KIMM-I) KIM M H (KIMM-I) KIM M	Method of constructing internal wall of modular house having rectangular parallelepiped exterior, involves forming side plates downward from end of upper plate to face side wall in long axis direction, and formed to be shorter by predetermined length than height of side wall in long axis direction
EP4279550	(NHYD) SPEIRA GMBH	Aluminum strip useful to produce packaging for solid, liquid or gaseous filling material and beverage can, comprises aluminum alloy, and antibacterial coating on one or both sides and containing zinc molybdate as antibacterial substance
EP4279525	(ECOV-N) ECOVANCE CO LTD	Biodegradable polyester resin composition used for forming molded article such as film, fiber, packaging material, bottle and container, comprises polyester resin comprising diol, aromatic dicarboxylic acid and aliphatic dicarboxylic acid, and has preset tensile strength reduction rate
DE102022206180	(CONW) CONTINENTAL REIFEN DEUT GMBH	Making dispersion to provide electrically conductive passages in vehicle tire involves placing diene polymer, vulcanization chemical, plasticizer oil and electrically conductive filler in mixing container and subjecting mixing container to mixing movement until dispersion reaches uniform consistency
WO2023209140	(CNRS) CENT NAT RECH SCI (CNRS) CNRS CENT NAT RECH SCI (ELRO) ELKEM SILICONES FRANCE SAS (UYLY) UNIV LYON 1 BERNARD CLAUDE (ACTI-N) ACTIVATION (ECOL-N) ECOLE SUPERIEURE CHIM PHYSIQUE ELECTRONI	Silicone composition used for forming coating, cross-linkable by irradiation comprises organopolysiloxane having 2-12C alkenyl groups linked to silicon, organopolysiloxane having silicon hydride units, and catalytically effective amount of hydrosilylation catalyst which is Pt(octane-2,4-dione) ₂

VOLVER A
CONTENIDO

NOTICIAS

PUESTA EN MARCHA DE NUEVO SISTEMA DE SOLICITUD ELECTRÓNICA DE INVENCIONES (OEPMSEI)



Desde principios del mes de noviembre, la OEPM tiene un nuevo sistema de presentación electrónica de invenciones, OEPMSEI. Con esta aplicación, desarrollada de la mano de la Oficina Europea de Patentes, queremos dar solución a una de las mayores demandas de nuestro colectivo de usuarios: modernizar y hacer más amigables e intuitivos nuestros sistemas de solicitud electrónica de las diferentes modalidades de invenciones.

El alcance de esta primera versión es limitado, incluyendo los siguientes

trámites:

- Solicitud de patente nacional y de modelo de utilidad (incluyendo, además de la primera presentación, la solicitud divisional, la transformación de patente europea y el cambio de modalidad)
- Solicitud de validación de patente europea (provisional y definitiva)
- Solicitud de Certificado Complementario de Protección (CCP), incluyendo la presentación de prórrogas CCP para medicamentos pediátricos.
- Solicitud internacional PCT (formulario PCT/RO/101)
- Solicitud de Patente Europea (formulario 1001)
- Un número limitado de trámites subsiguientes, que pueden consultarse en la Sede Electrónica

Durante todo este proceso de modernización se seguirá manteniendo el sistema actual (e-OLF) de forma paralela, pero se irá restringiendo su acceso de forma progresiva hasta llegar a su apagado final, una vez se encuentren migrados todos los trámites necesarios.

El acceso a la aplicación requerirá la identificación electrónica mediante cl@ve o utilizando una EPO Smartcard.

[Más información](#)

LA OFICINA ESPAÑOLA DE PATENTES Y MARCAS LANZA SU CAMPAÑA ANUAL PARA ESTIMULAR LA COMPRA DE PRODUCTOS ORIGINALES

La Oficina Española de Patentes y Marcas, O.A. (OEPM) realiza anualmente, de acuerdo con Plan Anual de Publicidad Institucional de la Administración General del Estado, una campaña de concienciación y sensibilización sobre la falsificación de bienes y mercancías y sus consecuencias sociales y económicas. En el año 2023 la campaña ha comenzado el viernes 24 de noviembre para hacerla coincidir con el Black Friday, uno de los periodos punta anual de compras por parte de los consumidores, junto con la Navidad.

El acto de presentación de la campaña ha sido presidido por la Directora de la OEPM, Aida Fernández. Al mismo han asistido representantes del sector público relacionados con la lucha frente al fenómeno de las falsificaciones, como las Fuerzas y Cuerpos de Seguridad del Estado, y del sector privado como asociaciones de consumidores, o representantes de marcas, entre otros. Los representantes de la Unidad Vigilancia Aduanera de Madrid y del Consejo de Consumidores y Usuario destacaron la necesidad de continuar informando y sensibilizando al consumidor sobre el perjuicio y los riesgos del uso de falsificaciones.



La campaña de este año con el lema **EL DAÑO DE LAS FALSIFICACIONES ES REAL** pretende informar y concienciar de que el consumo de productos falsificados hace que se cierren negocios, se ponga en riesgo la salud, o se contribuya a la contaminación global.

La creatividad se basa en un diseño original e impactante en el que se mezclan los productos falsificados con sus efectos y daños reales, de forma que se integran con la técnica del collage para crear un efecto visual que muestra los impactos reales de la compra de productos falsificados.



En palabras de *Amundsen*, la agencia creativa “el objetivo es mostrar al consumidor la realidad de los daños que producen los productos falsificados y hacerles conscientes de los mismos. A través de un juego de palabras se pasa de lo falso a lo real poniéndoles entre dos elecciones de manera directa. Les hacemos posicionarse. Queremos abrirles los ojos a través del impacto tanto visual como con el mensaje directo y que pone una realidad sobre la mesa”.

[Más información](#)

NUEVA EDICIÓN DEL CURSO DE GESTIÓN ADMINISTRATIVA DE LA PROPIEDAD INDUSTRIAL (PARALEGALES)

Una formación adecuada es uno de los pilares para hacer bien las cosas. Con este convencimiento, la Oficina Española de Patentes y Marcas, O.A. (OEPM) y la [Escuela de Organización Industrial, F.S.P. \(EOI\)](#) amparan la Cátedra de Innovación y Propiedad Industrial Carlos Fernández-Nóvoa, cuya finalidad última es facilitar la transferencia de conocimiento mutuo entre la empresa y las Universidades.



En este marco comenzó el 22 de enero la 12ª edición del Curso de Gestión Administrativa de la Propiedad Industrial (Paralegales). Este curso, dirigido a profesionales de Agencias de la Propiedad Industrial, personal de Departamentos de Propiedad Industrial de empresas, OTRIS de Universidades, Parques Tecnológicos, y OPIS, etc. y en general a todos los profesionales interesados en la

gestión de la Propiedad Industrial, tendrá lugar en formato virtual durante los meses de enero a mayo de 2024, y constará, como es habitual, de 5 módulos independientes.

La matriculación para cada módulo se puede realizar de forma independiente y es posible matricularse hasta la fecha de comienzo de cada uno de ellos.

Los principales objetivos del curso son:

- Ofrecer al participante una formación teórica y práctica en materia de Propiedad Industrial, invenciones, signos distintivos y diseños.
- Dar una formación en profundidad de todos los aspectos relevantes de los sistemas de protección españoles.
- Proporcionar formación continua y estructurada de los sistemas de protección internacionales: Europeo, PCT, USA, Chino, etc.
- Potenciar el intercambio de experiencias entre los diferentes sectores implicados a nivel nacional e internacional.

Más información

[Información e inscripciones](#)

[Programa](#)

NUEVA CONVOCATORIA DEL FONDO PARA PYMES "IDEAS POWERED FOR BUSINESS" 2024

La Oficina de Propiedad Intelectual de la Unión Europea (EUIPO) vuelve a poner en marcha el Fondo para Pymes "Ideas Powered for business".

El Fondo consiste en un programa de bonificaciones dirigido a las pymes de la Unión Europea (UE) en el ámbito de los derechos de propiedad industrial. La nueva convocatoria 2024 vuelve a incluir bonos para solicitudes de marcas, diseños, patentes y derechos de obtenciones vegetales elegibles tanto en la UE como en el extranjero.

Las bases de la convocatoria exigen:

1º presentar la solicitud del bono y esperar la aprobación de la subvención

2º realizar el trámite para el que se ha pedido la bonificación

3º acreditar que se ha presentado el trámite para solicitar el pago de la ayuda por el importe concedido.

El proceso de solicitud de ayudas comienza el 22 de enero de 2024 y se extenderá hasta el 6 de diciembre de 2024.



[Más información](#)

